



Engineer

Contractor

Case Study

application	
location	
product	

Subgrade Stabilization Owens Valley, Keeler, CA Mirafi® HP370 & Mirafi® 180N

TenCate develops and produces materials that function to increase performance, reduce costs and deliver measurable results by working with our customers to provide advanced solutions.

THE CHALLENGE

The contractor needed to construct a pipeline throughout the Owens Valley dry lake beds. This pipeline will make it possible to distribute water to a future irrigation system. Mirafi[®] HP370 was required to stabilize the access roads and berms over the dry lake beds.

THE DESIGN

The geotextile was required where the contractor could not obtain at least 90% relative compaction of the subgrade using the native material. The main access roads were designed to receive a six inch layer of aggregate, compacted to 95% relative compaction. The compaction of 90% for the subgrade and 95% for the aggregate layer was key for a stable working surface. Once a stable working surface was attained, the trenching equipment was brought in to begin excavating for the pipeline. Mirafi® HP370 was chosen for it's strength and outstanding hydraulic characteristics.

THE CONSTRUCTION

Placement of the geosynthetic was made after the proper elevation for the berms and access roads were attained. The Mirafi[®] HP370 was rolled out on the subgrade with a minimum overlap of two feet. A total of 500,000 square yards of Mirafi[®] HP370 was used in the construction. The native materials were dumped over the end of the last load of material. The subgrade was too soft for bottom dumping of the native materials. The contractor was able to construct up to 1,000 linear feet of berms/ access roads a day.

Barnard Construction Company

Boyle Engineering



Protective & Outdoor Fabrics Aerospace Composites Armour Composites Geosynthetics Industrial Fabrics Synthetic Grass



*TENCATE Mirafi

THE PERFORMANCE

The pipeline could not have been built without incorporating a geosynthetic into the construction of the berms and access roads. Mirafi[®] HP370 performed as anticipated. Barnard Construction Company and the Los Angeles Department of Water and Power were satisfied with the performance of the fabric.





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